

Montana DEQ Forest Fire Smoke Advisory

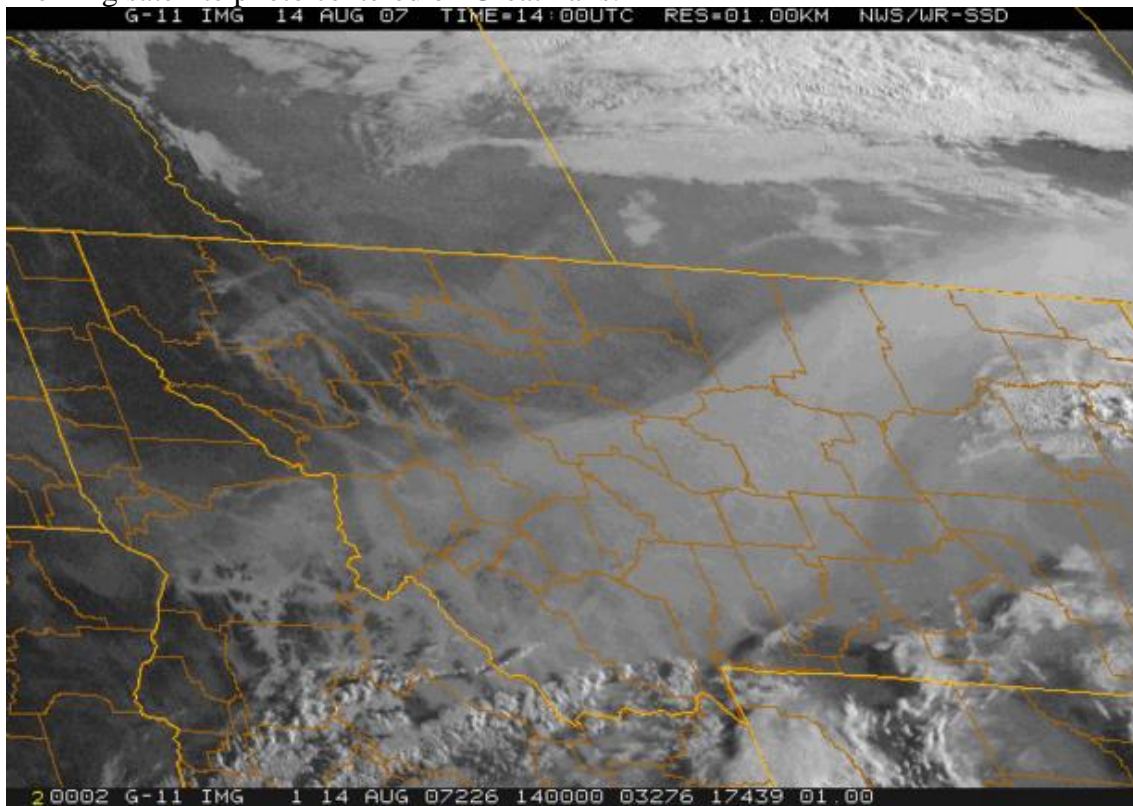
August 14 2007

10:00 AM Tuesday

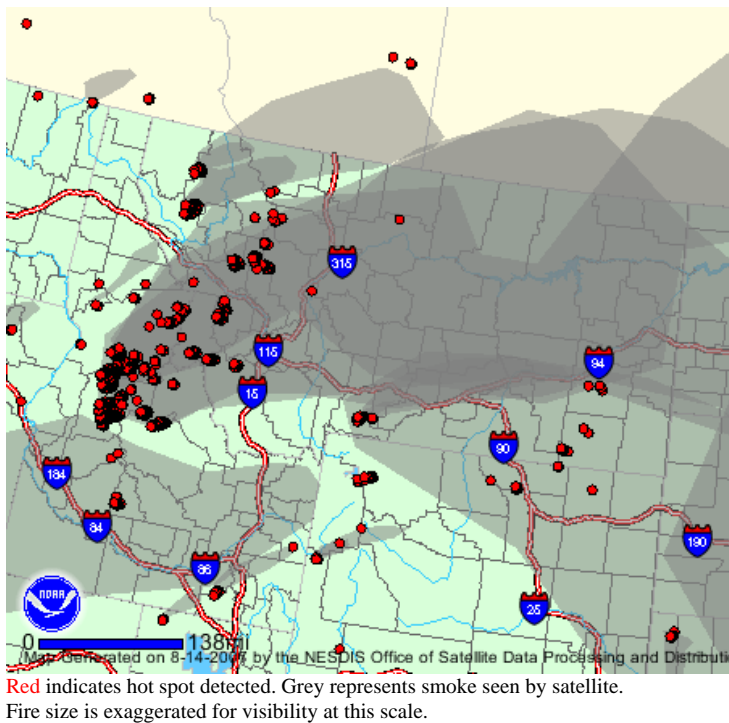
Current Situation

Air quality conditions in Butte have degraded to [VERY UNHEALTHY](#) this morning as smoke continues to plague the state. Residual smoke aloft and trapped in valleys are very evident on this morning's satellite photo below. Conditions have improved in some areas that were very smoky yesterday including Great Falls, Helena and Livingston. West of the divide however, [UNHEALTHY](#) levels of smoke are being recorded in Whitefish, Kalispell, Missoula, and Hamilton. Southwestern Montana is also being heavily impacted with Dillon and Bozeman both at [UNHEALTHY](#) as well. Smoke has lifted overhead temporarily in Polson and Ronan and they are at [UNHEALTHY FOR SENSITIVE](#) at the moment. Many other areas of the state with no reporting mechanism are also being impacted today. Residents near active fires or experiencing noticeable smoke levels should use the [VISIBILITY GUIDELINES](#) to determine smoke levels in their area and guide their activity decisions. Smoke aloft will mix down in many areas later this morning and direct smoke impacts from active fires will also be a problem again this afternoon. See the forecast at the bottom for details.

Morning satellite photo centered on Great Falls:



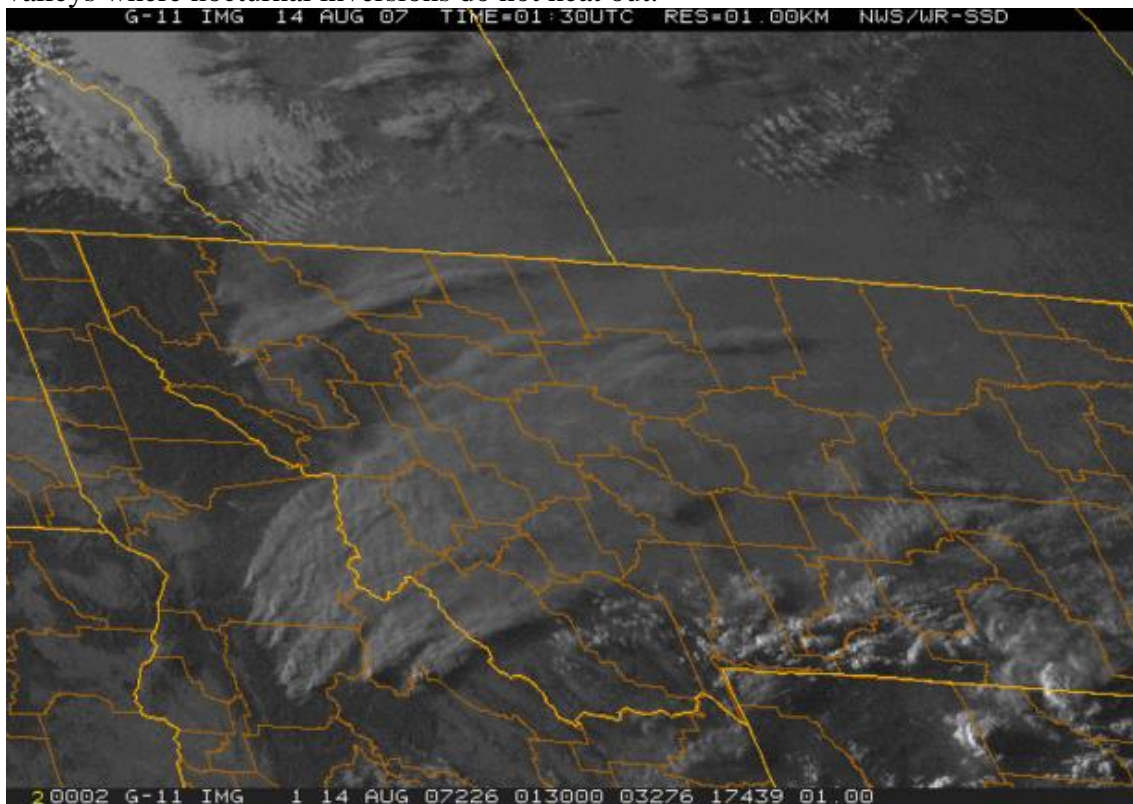
This morning's analysis from NOAA's satellite services division shows the active fires in Montana and the smoke plumes combining and spreading downwind(the analyzed smoke is based on yesterday's satellite coverage, the fire detects are based on last night's satellite coverage)



To identify individual fires on graphic above go here:

http://activefiremaps.fs.fed.us/lg_fire2.php

This satellite photo from 7:30 PM last night shows another day with the huge plumes of smoke rolling across the state from the fires in Idaho and Montana. The smoke is thick enough to limit surface heating and thus stagnant conditions in the bottom of some valleys where nocturnal inversions do not heat out.



Real time particulate information is currently available in most of the larger urban areas from several different sources including: DEQ run PM-10 BAMS and PM2.5 BAMS,

CS&KT run PM-10 TEOMS, NWS ASOS visibility monitors, and USFS remote access Nephelometers and BAMS.

This morning's smoke report is below, comparing particulate levels where we have information to MDEQ's Forest Fire health advisory levels.

Updated 10 AM August 14, 2007

Locations and severity of forest fire smoke reports since midnight of the date above at reporting stations.

HAZARDOUS	
VERY UNHEALTHY	Butte T24
UNHEALTHY	Kalispell T24 Whitefish T24 Missoula T8 Hamilton T24 Dillon Vis(8) Bozeman Vis(8)
UNHEALTHY FOR SENSITIVE GROUPS	Polson T24 Ronan T24 Augusta T24
MODERATE	Helena Vis(1) Choteau T24 Great Falls Vis(8) West Yellowstone T1

T1(x)	One-hour TEOM or BAM value (number of values)
T8(x)	Eight-hour average TEOM or BAM value(number of values)
T24	24 hour average TEOM or BAM value
Vis(x)	Visibility value(number of hours)
Vis(am/pm)	Visibility value from twice/day reporting stations
(est)	estimate

Local impacts in areas immediately adjacent to active fires are expected to exceed some or all of the advisory levels. DEQ recommends the use of local [visibility guidelines](#) to evaluate possible health risks and make informed activity decisions.

Forecast

With Red Flag conditions along the Front Range, and hot and dry advisories everywhere else, smoke production from the active fires will stay high for the next couple of days and smoke will continue to be a problem in many areas. Plumes will be headed east and slightly north of the active fires and direct plume impacts will be occasionally severe. Smoke will continue to be trapped in the valleys of western Montana and when the smoke aloft mixes down later this morning, wide areas of the state will see smoke at the surface for a few hours. Hazy sky will persist across the state under the plume overhead. Smoke will thin out during the afternoon in some of the areas that are being heavily impacted this morning but the relief will be brief. Smoke levels will be intermittently very bad with some clearing as the plumes move around. Residents downwind of the active fires and experiencing impacts from residual smoke will need to pay close attention to conditions in their area and use the [visibility guidelines](#) to guide their activity decisions as the situation changes.